

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	212	track\$3 near3 image\$1 and (object or human or face or nose pr mouth or eyes)and(computer adj graphic or CG)near3 image\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/30 10:55
L3	26	extract\$1 and(user or operator or human)near3 image\$1 and convert\$3 and mirrored near3 image\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/30 11:07
L4	4819905	(superimpos\$3 or combined or comparision or match\$3 or compar\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/30 11:01
L5	202	L1 and L4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/30 11:01
L6	0	L3 and L5	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/30 11:01
L7	49	L5 and extract\$1 and(user or operator or human)and image\$1 and convert\$3 near3 image\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/30 11:02
L8	0	L7 and mirrored near3 image\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/30 11:03
L9	34	L7 and (@ad<"19980519" or @rlad<"19980519" or @prad<"19980519" or @ptad<"19980519")	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/30 11:05
L10	0	L9 and convert\$3 and left adj light and mirrored near3 image\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/30 11:08

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Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	142	track\$3 near3 image\$1 and(object or human or face or nose pr mouth or eyes)and(computer adj graphic or CG)near3 image\$1	USPAT	OR	ON	2006/09/30 11:27
L2	40325	L1 and extract\$1 and(user or operator or human)and image\$1and convert\$3 near3 image\$1 and(superimpos\$3 or combined or comparision or match\$3 or compar\$5)	USPAT	OR	ON	2006/09/30 11:46
L3	52	L1 and L2	USPAT	OR	ON	2006/09/30 11:24
L4	0	L3 and(user or operator or human)near3 image\$1 and convert\$3 and mirrored near3 image\$1	USPAT	OR	ON	2006/09/30 11:45
L5	374	383/103,190,294.CCLS.	USPAT	OR	ON	2006/09/30 11:29
L6	2119	345/204,629.CCLS.	USPAT	OR	ON	2006/09/30 11:26
L7	542	348/169.CCLS.	USPAT	OR	ON	2006/09/30 11:26
L8	0	L1 and L5	USPAT	OR	ON	2006/09/30 11:28
L10	142	track\$3 near3 image\$1 and(object or human or face or nose or mouth or eyes)and(computer adj graphic or CG)near3 image\$1	USPAT	OR	ON	2006/09/30 11:45
L11	0	L10 and L5	USPAT	OR	ON	2006/09/30 11:28
L12	0	L2 and L5	USPAT	OR	ON	2006/09/30 11:28
L13	833	383/103,117,118,115,190,294.CCLS.	USPAT	OR	ON	2006/09/30 11:40
L14	0	L13 and L10	USPAT	OR	ON	2006/09/30 11:40
L15	962	383/103,117,118,115,190,294.CCLS.	USPAT	OR	ON	2006/09/30 11:40
L16	0	L15 and L10	USPAT	OR	ON	2006/09/30 11:40
L17	6018	track\$3 near3 image\$1 and(object or human or face or nose or mouth or eyes)	USPAT	OR	ON	2006/09/30 11:41
L18	0	L17 and L15	USPAT	OR	ON	2006/09/30 11:41
L19	5172	track\$3 near3 object and(human or face or nose or mouth or eyes)	USPAT	OR	ON	2006/09/30 11:42
L20	0	L15 and L19	USPAT	OR	ON	2006/09/30 11:43
L21	19	L6 and L19	USPAT	OR	ON	2006/09/30 11:43
L22	2	L21 and track\$3 near3 image\$1 and(object or human or face or nose or mouth or eyes)and(computer adj graphic or CG)near3 image\$1	USPAT	OR	ON	2006/09/30 11:43

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L23	40325	L22 and extract\$1 and(user or operator or human)and image\$1and convert\$3 near3 image\$1 and(superimpos\$3 or combined or comparision or match\$3 or compar\$5)	USPAT	OR	ON	2006/09/30 11:44
L24	2	L22 and L23	USPAT	OR	ON	2006/09/30 11:45
L25	0	L24 and(user or operator or human)near3 image\$1 and convert\$3 and mirrored near3 image\$1	USPAT	OR	ON	2006/09/30 11:47
L26	4	L7 and track\$3 near3 image\$1 and(object or human or face or nose or mouth or eyes)and(computer adj graphic or CG)near3 image\$1	USPAT	OR	ON	2006/09/30 11:46
L27	40325	L26 and extract\$1 and(user or operator or human)and image\$1and convert\$3 near3 image\$1 and(superimpos\$3 or combined or comparision or match\$3 or compar\$5)	USPAT	OR	ON	2006/09/30 11:46
L28	1	L26 and l27	USPAT	OR	ON	2006/09/30 11:46
L29	0	L28 and(user or operator or human)near3 image\$1 and convert\$3 and mirrored near3 image\$1	USPAT	OR	ON	2006/09/30 11:47

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	0	(track\$3 near3 image\$1 and(object or human or face or nose or mouth or eyes)and(computer adj graphic or CG)near3 image\$1 and extract\$1 and(user or operator or human)and image\$1 and convert\$3 near3 image\$1 and(superimpos\$3 or combined or comparision or match\$3 or compar\$5)and convert\$3 and mirrored near3 image\$1).CLM.	US-PGPUB	OR	ON	2006/09/30 11:52



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Results

#1	((track\$* adj image* and(object or human or face or nose or mouth or eyes))<in>metadata)	0
#2	((track* adj image* and(object or human or face or nose or mouth or eyes))<in>metadata)	0
#3	((track and(object or human or face or nose or mouth or eyes))<in>metadata)	7057
#4	((l3 and extract* and(user or operator or human)and image* and convert* adj image* and (superimpos* or combined or comparison or match* or compar*))<in>metadata)	0
#5	((l3 and extract* and(user or operator or human)and image* and convert* adj image* )<in>metadata)	0
#6	((l3 and extract* and image* and convert* adj image* )<in>metadata)	0
#7	((l3 and extract*)<in>metadata)	2
#8	((l3 and extract*)<in>metadata)	2
#9	((l3 and l7)<in>metadata)	1

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## TCP-Migration with Application-Layer Dispatching: A New HTTP Request Distribution Architecture in Locally Distributed Web Server Systems

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On page(s): 1 - 10

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### Abstract

A cluster-based server system is a developing technology that could achieve high scalability by using several dispatchers, such as layer-4 or layer-7 switches, to appropriately distribute requests from clients. Many recent Web server systems have been developed as cluster systems, but such systems are so complicated that important information for appropriate distribution decisions is in higher layer (i.e., application layer or layer-7). Although the L7 switches are appliances that can redirect requests by examining the application-layer information, it is difficult to update or modify their distribution algorithms. This paper proposes a novel architecture based on TCP-migration mechanism that provides complete redirection (displacement) of a TCP session from a dispatcher to Web servers. The key idea is physical separation of L7 switch functionality: packet forwarding and request dispatching mechanisms. With NAT mechanism on the L3 switch and sophisticated management of virtual private IP addresses on the cluster servers, the dispatcher is released from relaying or translating both in-bound and out-bound TCP packets after the request has been redirected. This architecture can achieve greater flexibility because the forwarding is performed fast by hardware (i.e., the switch) and the dispatching is managed by software (i.e., application servers). We have designed and implemented this mechanism on Linux 2.4 kernel and evaluated its performance. The experimental results show that the overhead for handling multiple virtual IP addresses is almost negligible. Furthermore, the overhead with TCP-migration by using mini httpd server and wget client is approximately 1 ms, regardless of the reply size, on 3.

### Index Terms

Inspec

Controlled Indexing

Not Available

Non-controlled Indexing

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Author Keywords

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### References

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